उद्योगों में निर्मित की जा रही थीं, ऐसी वस्तुओं को स्थानांतरित किया जा रहा है निजी उद्योगों में? क्या सरकार यह नहीं समझती है...

उपसभापति : आप सवाल पूछिए ।

डा० जगन्नाथ मिश्र : कि देश में एक भ्रम फल गया है और ऐसा भ्रम फला हुआ है कि सार्वजनिक प्रतिष्ठानों की महत्ता घट रही है, जबकि सरकार की मंशा नहीं है । राज्यमंत्री जी ने जो उत्तर दिया है, उससे इस बात की आशंका की पुष्टि होती है कि हम निजी प्रतिष्ठानों को रक्षा-मंत्रालय में उत्पादन होने वाली वस्तुओं को स्थानांतरित कर रहे हैं । ऐसा क्यों हो रहा है?

श्री शिवराज पाटिल : महोदया, यह बहुत ही अच्छे प्रश्न है और अगर आपकी इजाजत हो तो थोड़ा सा खुलकर मैं बोलना चाहूंगा । (**व्यवधान**)... महोदया, मैं यह बताना चाहूंगा ...(**व्यवधान**)...

SHRI A. G. KULKARNI: The House is already bored now. Let this be taken up in the next session.

श्री अटल बिहारी वाजपेयी : आप हमें बचाइए ...(**व्यवधान**)...

THE DEPUTY CHAIRMAN: Let him mention a few of them.

श्री शिवराज पाटिल : मैडम, मैं यह बताना चाहूंगा कि हमारी जो सन् 1956 की इंडस्ट्रियल पालिसी है, उसमें जो भी कहा गया है, उससे कोई डिवीएशन नहीं किया गया है ।

उपसभापति : आप कौनसे आइटम बना रहे हैं प्राइवेट इसमें, मच्छरदानी वगैरह क्या बना रहे हैं?

श्री शिवराज पाटिल : मैडम, उन्होंने पूछा, हमारी जो मुख्य-पालिसी है, उसको डिविएशन कर रहे हैं क्या? और उन्होंने पूछा उसके बारे में कि लोगों के दिलों में अलग-अलग ख्यालात पैदा हो रहे हैं, उस पर सरकार के क्या ख्याल हैं? मासकिटोनेट के बारे में मैं पहले ही बता चुका हूं । मैं यह कहना चाहता हू कि 1956 की जो हमारी पालिसी है, उससे हटकर हम कुछ काम नहीं कर रहे हैं उसके भीतर रहकर कर रहे हैं । हमारी मिक्स्ड एकोनोमी की नीति है, इसको हम इस्तेमाल में ला रहे हैं और मैं यह भी बताना चाहूंगा कि प्रधानमंत्री जी ने और आज की गवर्नमेंट ने पब्लिक सेक्टर में सबसे ज्यादा इन्वेस्टमेंट करने की नीति अपनाई है । हमारा जो इन्वेस्टमेंट है पब्लिक सेक्टर में, उस संबंध में मैं बताना चाहूंगा 6000 करोड़ रुपए का आर्डीनेन्स फैक्टरी से मांग है और दूसरा पब्लिक सेक्टर से 4000 करोड़ रुपए की मांग है, इस तरह 10,000 करोड़ की मांग हमें आने वाले 7–8 वर्षों में करने की है। इससे पता चलता है कि हमारी जो नीति है पब्लिक सेक्टर के सम्बन्ध में उसमें कोई बेसिक चेंज नहीं है ।

*263. (*The questioner (Shri V. Narayanasamy) was absent. For answer*, vide *col.* 26 infra).

Emergent plan for atomic power plants

*264. SHRI KAPIL VERMA:†
SHRIMATI VEENA VERMA:

Will the PRIME MINISTER be pleased to state:

(a) whether it is a fact that he has recently ordered the preparation of an emergent plan for every nuclear power station and if so, what action has been taken in this regard;

(b) whether it is a fact that a mock exercise of a nuclear accident at Kalpakkam Atomic Power Station near Madras was organised on the 30th March 1988 if so, whether it was successful; and

(c) what other precautions have been taken in this regard to cope with Chernobyl type nuclear accidents?

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†The question was actually asked on the floor of the House by Shri Kapil Verma.

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY AND THE MINISTER OF STATE IN THE DEPARTMENTS OF OCEAN DEVELOPMENT, ATOMIC ENERGY, ELECTRONICS AND SPACE (SHRI K. R. NARAYANAN): (a) to (c) A Statement is laid on the Table of the House.

Statement

(a) Emergency Plans are part of the radiation protection procedures for each major nuclear facility. Since 1981, the Department of Atomic Energy had undertaken the preparation of a comprehensive plan, taking into account the international trends and latest technological developments. Following Chernobyl accident, Government formed a National Emergency Response Committee for drawing up Emergency Preparedness Plans to safeguard health and safety of the public in the event of an accidental release. The Committee has in turn appointed Regional (State) Emergency Response Committees in the concerned States which in coordination with the Nuclead Power Station Authorities have prepared action plans for dealing with emergencies.

(b) Yes, Sir, it was successful.

(c) It is most unlikely that an accident like the one that occured in Chernobyl can occur in our reactors, as these are of a totally different type, do not use graphite and have other inherent safety features. However, emergency plans have been drawn up to ensure safety of the public in case of an accident in our nuclear installations.

SHRI KAPIL VERMA: While the spectre of Chernobyl disaster and three-mile Island is still fresh in the world's mind, the exposure of fire that broke out 30 years ago at Windscale nuclear plant in Britain is more disturbing. In this connection, I want to know, what are the main features of the comprehensive plan prepared by the Department of Atomic Energy, and what are the safeguards being provided against accidents because of (1) overwhelming radiation from nuclear reactors and (2) radiation itself; what are the main features of the Emergency Preparednes Plans to safeguard the health and security of the people. In the wake of Chernobyl accident, the safety Review Committee set up a task force to review the safety and emergency system in the country's power plants. I want to know which of the recommendations of the task force have been accepted and implemented.

SHRI K. R. NARAYANAN: The security of the nuclear plants involves various kinds of technological, social and organisational preparedness. First of all, it depends on the safety of the plant itself. We have been taking necessary safeguards at every stage, from the stage of actual construction, the material used, as well as incorporating many specific safety devices into our atomic plants. I think the hon. Member is perhaps, more concerned with accidents like in Chernobyl which occurred and what kind of precautions and safety preparations we are making in the event of any happening. First of all, I would like say that for the Indian heavy water pressurised type of reactors, such an accident is most unlikely; but we cannot take any chances. Therefore, at the instance of the Prime Minister, we have set up National Emergency Response Committee in order to prepare specific details/plans for all the atomic reactors to safeguard the general public not only to safegurd the plant but the general public and those who work inside the plant, against the consequences of an unlikely accident.

About the organisational structure about which the hon. Member has asked, the apex structure is the National Emergency Response Committee headed by the Chairman of the Atomic Energy Commission. Then we have a Regional Emergency Response Committee which is headed by the secretary of State Government. Off-site Emergenry Committee is headed by the District Collector with which are associated the Plant Director, health authorities, transport authorities, Communication authorities and we have also conducted, as I have answered in reply to the main question, a much exercise in order to ensure that our plants really function.

SHRI KAPIL VERMA: I had asked about the safeguards, I hope ht will reply to it.

My second supplementary is, whether following the Prime Minister's visit to Kalpakkam, a condition has been laid down or is being laid down that no site for a new nuclear power station will be approved unless an emergency preparedness plan has been formulated and implemented. I would like to know, what steps are being taken to educate the people around and near the sites of atomic power plants so that in case of accidents people may act in the manner prescribed. I would also like to know whether the Government is going to set up a separate disaster management agency on a permanent basis to look after this. The hon. Minister may also answer my question in regard to safeguards.

SHRI K. R. NARAYANAN : Firstly, about the safeguards. The safeguards are actually the safeguards in the plant because in order to prevent such an accident taking place, we should keep the plant technologically safe. For this purpose, first of all, we have what we call double containment of the plant, that is; two huge, strong, containment walls are built which, in the case of release of radiation due to an accident, will be able to contain the radiation within the plant, within the building, itself. This is one of the major safeguards built into the atomic plant structure, nuclear plant architecture.

Then, in regard to the fuel, there is cladding for the fuel. There is a closed circuit. There is a coolant which prevents any kind of an explosion. Then, we have what we call fail safe device in the plant, that is; if it fails, then, immediately, that system can be stopped so that no consequences, deleterious consequences, will follow. Then we have redundancy, that is; more than one substance so that if one fails, another one can be utilised. Then, we have the emergency cooling system and also more than one automatic shutdown system, which means that in case of an accident, if one shutdown system fails, the other one with a slightly different design can be put into operation. These and such other technological precautions are provided.

In regard to the hon. Member's question about the Prime Minister's instructions, it is quite correct that the Prime Minister has given instructions that no atomic power plant should be set up until and unless we prepare foolproof plans for preparing again any such emergency. As a matter of fact, even before, the Atomic Energy Department has been making such preparations and the Atomic Energy Regulatory Board actually gives permission for a plant to become functional only when they are satisfied that all the safeguards start are built into it.

SHRIMATI VEENA VERMA: I would like to know from the hon. Minister whether India has signed any convention on early notification of a nuclear accident and the convention on assistance in the case of a nuclear accidents or radiological emergency adopted by the International Atomic Energy Agency General Conference in 1986. If so, whether it has proved useful for India and to what extent ? I would also like to know whether any help is being provided to us. In how many cases, information about mishaps in other countries have been given to us under the convention ? Part (b) of my question is, the International Atomic Energy Agency held a seminar after the Cherobyl disaster. How far its recommendations are being implemented in our country ?

SHRI K. R. NARAYANAN : Madam, India has signed the convention and, fortunately, after the signing of the convention, no nuclear accident has taken place. Therefore, we had no occasion to use this facility. In regard to the seminar, I do not know which seminar the hon. Member is referring to. But certain seminars have taken place in which India has participated and, as a matter of fact, following this convention, following the dangerous example of the Chernobyl accidents, we have redoubled our safeguard and precautionary measures.

SHRI KAMAL MORARKA : Madam, I would like to know from the hon. Minister whether, in view of the Chernobyl disaster, there has been any change in the Government's policy in regard to the question of location of atomic power plants. Of course, the Minister may not like to disclose immediately the locations. But I would like to know whether future plans will be located keeping in mind, that they are not located in thickly populated areas.

We have had our own Bhopal disaster and the Chernobyl disaster is an atomic one. Keeping this in view, I want to know, what is the Government's location policy in regard to atomic power plants?

SHRI K. R. NARAYANAN : The Government has already been following a locational policy which avoids thickly populated areas, areas which have any special geographical, seismic or other kinds of problems. Even in seismic areas atomic plants can be built because there are safeguards against earthquake which can be built into the plant.

About the location policy, certainly there was no need to change the policy of locating plants as a result of the Chernobyl accident which had nothing to do with the location as such. They were conducting some new uncalled for type of experiment at the plant which resulted in this explosion. Therefore, this has nothing to do with the location. We have been following a policy of avoiding thickly populated areas in locating our plants.

SHRI MURLIDHAR CHANDRAKANT BHANDARE: Madam Deputy Chairman, I think this concept of fail-safe in case of nuclear power stations is going to be a distant dream. I do not think we are going to have any nuclear plant which will be safe when it fails. I must, however, compliment the Prime Minister because he took the initiative in Bombay in saying that this emergent plan should be prepared in case any emergency arises. I think, the most important aspect of this is the early warning system. If I am borrowing the expression, for the residents nearabout who are likely to be affected by such eventuality. I cannot think of the consequence but still I would like to ask the hon. Minister as to what steps are being taken to activise a complete efficacious early warning system for the residents near about the nuclear installations.

SHRI K. R. NARAYANAN: Perhaps the best answer is to give some details of the emergency response drill that we conducted at Kalpakkam. We do give early warning and take other kinds of measures required. Following is the sequence of action taken at Kalpakkam. For example, 0800 hrs. site emergency at MAPS-message sent to Off-site Emergency Director. 1000 hrs., message about off-site emergency grade I sent to OED. This means that there is an emergency in the plant. Fifteen minutes later off-site emergency was declared. 1045 hrs., traffic was diverted and warning and advise teams were despatched to different areas. At 1245 hrs. OED was informed about grade 3 emergency, that is the general off-site emergency involving the public. At 1300 hrs. the officer on emergency duty declares the emergency. At 1330 hrs. alert for evacuation was given. At 1440 hrs. convoy with escort teams reched villages. At 1510 hrs. MAPS plant was under control. At 1600 hrs. buses reached the rallying post for evacuation. At 1755 hrs. the officer on emergency duty informed of the termination of the emergency. At 1730 hrs. the emergency was terminated. This was the sequence.

SHRI MURLIDHAR CHANDRAKANT BHANDARE : How do you link it up with the disaster that takes place.

SHRI K. R. NARAYANAN: About the fait safe system. I was referring to a technological device, if a certain part fails.

DR. (SHRIMATI) SAROJINI MAHISHI: The Minister has told us about the safety measures for the atomic energy plants. He also said that heavy water is being used as a moderator. On account of that there is less risk also. I would like to know how it differs from the moderator that was being used in Chernobyl, because whether it is a nuclear explosion or an earthquake, both of them are recorded by seismological machinery. So how does it make a difference and in what way less risk is there in the atomic energy plant ?

THE DEPUTY CHAIRMAN: Question Hour is over.

WRITTEN ANSWERS TO QUESTIONS

Uniform criteria for award of scholarship to students in Sainik Schools

*263. SHRI V. NARAYANASAMY: Will the Minister of DEFENCE be pleased to state:

(a) whether it is a fact that the various Sainik schools in the country have been